January 11, 2013 1420 East 6th Ave. P.O. Box 200701 Helena, MT 59620-0701

Environmental Quality Council Montana Department of Environmental Quality Montana Department of Fish, Wildlife and Parks

Fisheries Bureau Endangered Species Coordinator Native Species Coordinator - Fisheries Missoula Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Montana River Action, 304 N 18th Avenue, Bozeman, MT 59715
Granite Conservation District, P.O. Box 926, Philipsburg, MT 59858
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Trout Unlimited, 111 N. Higgins, Suite 500, Missoula, MT 59802
Harvey Creek Ranch, 176 Beatrice Lane, Clinton, MT 59825

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding for a project calling for the replacement of a push-up diversion dam located on Harvey Creek with construction of a rock cross vane. Harvey Creek is a tributary to the Clark Fork River. The re-constructed diversion would include a new head gate, flow monitoring device and fish screen. In addition to modifying the diversion, the project would install riparian fencing on the west side of the stream, complementing riparian fencing recently installed on the east side of the stream, resulting in the full protection of approximately 2.5 miles of riparian corridor on the Harvey Creek Ranch from livestock overgrazing. A future restoration phase tentatively would involve consolidating all seven irrigation diversions located on the Harvey Creek Ranch into this single reconstructed diversion. The intent of the project is to improve habitat conditions for populations of bull trout and genetically pure westslope cutthroat trout residing in Harvey Creek. The project site is located on the Harvey Creek Ranch approximately 3 miles southwest of Bearmouth in Granite County.

Please submit any comments that you have by 5:00 P.M., February 15, 2013 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely, Mark Lere, Program Officer Habitat Section Fisheries Bureau e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT

Fisheries Division Montana Fish, Wildlife and Parks Harvey Creek Diversion Re-construction and Riparian Fence Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

The Future Fisheries Program is proposing to provide partial funding to a project calling for the reconstruction of an irrigation diversion located on Harvey Creek by replacing an existing push-up dam with a rock cross vane and by installing a new head gate and fish screen. Additionally, the project calls for installing 12,000 feet of riparian fencing on the west side stream to complement riparian fencing recently installed on the east side of the stream. The intent of this project is to improve habitat conditions for populations of bull trout and genetically pure westslope cutthroat trout. The project site is located approximately 3 miles southwest of Bearmouth in Granite County on property owned by the Harvey Creek Ranch.

- I. <u>Location of Project</u>: This project will be conducted on a reach of Harvey Creek located approximately 3 miles southwest of Bearmouth within Township 11 North, Range 14 West, Section 29 in Granite County (Attachment 1). The project site is located on property owned by the Harvey Creek Ranch.
- II. <u>Need for the Project</u>: One goal within Montana Fish, Wildlife and Parks six year operations plan for the fisheries program is to "restore and enhance degraded habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help meet this goal.

Harvey Creek is a tributary to the Clark Fork River that supports a genetically pure population of westslope cutthroat trout, as well as bull trout. These native populations of fish are protected from invasion by non-natives by a man-made barrier at the outlet of a county road culvert located near the mouth. Currently, there are 8 irrigation diversions taking water from Harvey Creek and all have been documented to entrain fish (Attachment 2). Seven of these diversions are located on the Harvey Creek Ranch and the diversion identified for re-construction in this proposal appears to pose the greatest risk of fish entrainment on the ranch. Additionally, the lack of riparian fencing on the west side of the stream has allowed for overuse by livestock.

III. Scope of the Project:

This project calls for eliminating a source of entrainment with the installation of a fish screen on the

uppermost diversion. The project also would provide for year-round upstream fish passage by replacing an existing push up dam with a more permanent rock cross vane that (Attachment 3). Installation of the rock cross vane would reduce a chronic source of sedimentation associated with the ongoing maintenance of the diversion. Additionally, the project calls for installing approximately 12,000 feet of riparian fencing located on the west side of the stream to complement fencing recently installed on the east side of the stream. A future planned phase tentatively is proposing to consolidate all of the diversions located on the Harvey Creek Ranch into this single re-constructed and screened diversion, eliminating additional entrainment and enhancing in-stream flow.

This project is expected to cost \$62,453.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$16,126.00. The remaining funding would come from other sources and from in-kind services:

Contributor	In-kind service	In-kind cash
NRD Program		\$25,227.00
US Fish and Wildlife Service		\$9,500.00
Harvey Creek Ranch	\$10,000.00	

IV. Environmental Impact Checklist:

Please see attached checklist.

V. <u>Explanation of Impacts to the Physical Environment</u>

1. Terrestrial and aquatic life and habitats.

Harvey Creek supports populations of bull trout and genetically pure westslope cutthroat trout. Eliminating a source of entrainment, improving upstream fish passage and protecting the riparian corridor from livestock over-use is expected to enhance aquatic habitat and increase existing native fish populations. The fencing is expected to allow the riparian vegetative community to recover from past grazing practices and improve habitat for riparian dependent wildlife.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, operation of equipment in the active channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization). A 310 permit (Montana Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted to determine the requirements to meet the federal Clean Water Act (404 permit). In the long term, water quality is expected to be improved by eliminating a source of chronic sedimentation due to the reduction of maintenance associated with the diversion. The quantity of water diverted for irrigation would remain the same under this project, but there are long-term plans to consolidate seven existing ditches located on the Harvey Creek Ranch into this single point of diversion, resulting in a water

savings and improved in-stream flow in Harvey Creek.

3. Geology, soil quality and moisture.

Soils within the footprint of the diversion site would be disturbed during construction (less than 0.5 acres), but would be stabilized with re-seeding.

4. Vegetation cover, quantity and quality.

Vegetation within the footprint of the diversion site would be disturbed during construction, primarily involving non-native grasses. Re-seeding and the installation of additional riparian fencing would mitigate for this disturbance.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment. In the long term, aesthetics would be enhanced by restoring a degraded reach of stream to a healthier and more natural stream environment.

7. Unique, endangered, fragile or limited environmental resources.

Harvey Creek supports a genetically pure population of westslope cutthroat trout and a population of bull trout. This project is expected to improve habitat conditions in Harvey Creek and, as a result, is expected to enhance these native fish populations. Because Harvey Creek supports bull trout, the project will be included in Montana Fish, Wildlife and Park's Section 6 conservation plan with the U.S. Fish and Wildlife Service.

9. Historic and archaeological sites.

The existing diversion has been frequently disturbed by continual maintenance associated with the in-channel push up dam. As a result, there is a very low likelihood that cultural properties will be impacted by the proposed project. Should cultural materials be inadvertently discovered during the project, the State Historic Preservation Office will be contacted and the site will be investigated.

VI. Explanation of Impacts on the Human Environment.

None.

VII. <u>Discussion and Evaluation of Reasonable Alternatives.</u>

1. <u>No Action Alternative</u>

If no Program funding is provided, the applicant would have to either seek additional sources of funding to complete the project or this portion of Harvey Creek would remain degraded. An existing irrigation diversion would continue to be a source of entrainment and act as a seasonal

upstream migration barrier. The potential for livestock over-use within the riparian corridor would remain.

2. The Proposed Alternative

The proposed alternative is designed to provide partial funding to a project calling for the reconstruction of an existing irrigation diversion that would result in year round upstream fish passage and the prevention of entrainment with the installation of a fish screen. The alternative also would install additional riparian fencing to protect the stream corridor from over-use by livestock. This alternative is expected to enhance aquatic habitat and fish populations residing in the stream, and improve the riparian vegetative community. Populations of bull trout and genetically pure westslope cutthroat trout are expected to be enhanced.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The project application to the Future Fisheries Improvement Program has been posted on the Montana Fish, Wildlife and Park webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and <u>funding will be contingent upon their approval</u>. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on Montana Fish, Wildlife and Parks webpage: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on February 15, 2013.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Section
Fisheries Bureau
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620
Telephone: (406) 444-2432

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MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701 (406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Harvey Creek Diversion Re-construction and Riparian Fence Project

Division/Bureau Fisheries Bureau -Future Fisheries Improvement

Description of Project The Future Fisheries Improvement Program is proposing to provide partial funding to a project designed to re-construct an irrigation diversion located on Harvey Creek by replacing an existing push-up dam with a rock cross vane and by installing a new headgate, flow monitoring device and fish screen. Additionally, the project calls for installing additional riparian fencing on the west side of the stream. The intent of the project is to improve habitat conditions for bull trout and genetically pure westslope cutthroat trout. The project site is located on the Harvey Creek Ranch approximately 3 miles southwest of Bearmouth on Granite County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

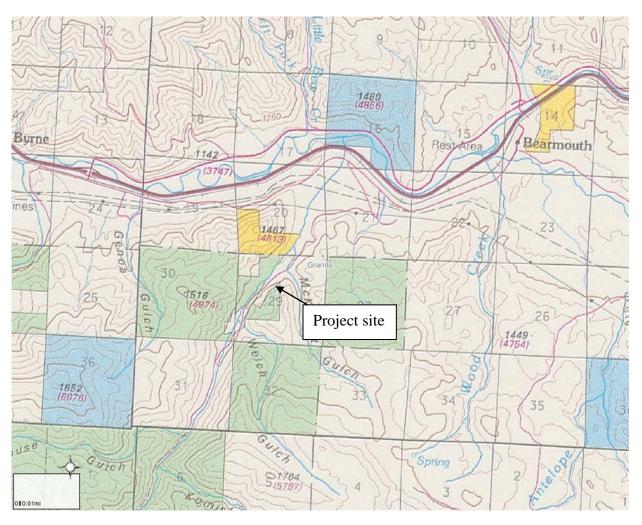
POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

TOTENTIAL IVII ACTS ON TI		II (EI () II () I		1		r i
	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities				X		
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

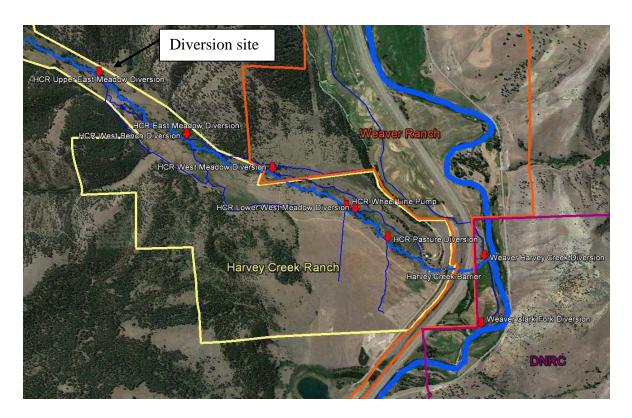
Other groups or agencies contacted or which may have overlapping jurisdiction <u>Granite Conservation</u> <u>District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office</u>

Individuals or groups contributing to this EA <u>Casey Hackathorne</u>, <u>Trout Unlimited</u>. Recommendation concerning preparation of EIS <u>No EIS required</u>.

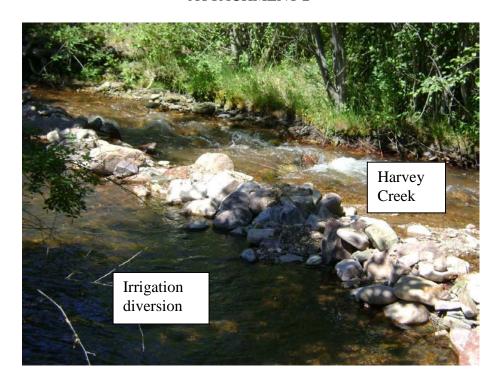
EA prepared by: Mark Lere Date: January 3, 2013



Map showing location of project site on Harvey Creek ATTACHMENT 1



ATTACHMENT 2



ATTACHMENT 3